

IN THE CLAIMS:

1. **(Currently amended)** An apparatus for increasing blood flow to a person's skin for regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the person~~ inherently having a body weight and, the apparatus comprising a work-out device to be actuated with the person's legs, said work-out device being enclosed by an air-tight housing, said housing comprising an opening which is formed for a tight enclosure of the person's waist area, with a pressure device for producing differential pressure in said housing, said pressure device being connected with said housing and being arranged so as to alternately produce a pressure reduction and a pressure increase in the housing, and a support means in the housing for supporting the person and taking the person's ~~to take the body weight off the person's legs of the person.~~

2. **(Previously Presented)** An apparatus according to claim 1, wherein the support means is a seat.

3. **(Previously Presented)** An apparatus according to claim 1, wherein the device for producing a differential pressure is arranged so as to ensure a predetermined air pressure throughout the housing.

4. **(Previously Presented)** An apparatus according to claim 1, wherein the pressure device provides a reduction in pressure from 0.02 bar to 0.2 bar.

5. **(Previously Presented)** An apparatus according to claim 1, wherein the pressure device provides a reduction in pressure from 0.05 bar to 0.15 bar.

6-8. **(Previously Canceled)**

9. **(Previously Presented)** An apparatus according to claim 2, wherein the seat is adjustable in height.

10-31. **(Canceled)**

32. **(Currently Amended)** Apparatus for increasing blood flow to a person's skin for regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the person~~, the apparatus comprising:

means for doing physical exercise, said means being actuated by the person's legs;

means for generating a pressure different from ambient pressure;

means for containing the pressure generated by said means for generating a pressure, said means for containing the pressure being arranged such that it houses the means for doing physical exercise and that it sealingly surrounds lower parts of said person's body;

wherein said apparatus further comprises

means for supporting said person's body weight, said means for supporting the body weight of said person being arranged such that

the person's legs are not exposed to the body weight during use of said means for doing physical exercise.

33. **(Currently Amended)** A method for increasing blood flow to ~~the skin of a person~~ a person's skin and regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the person~~, comprising the following steps:

placing ~~the lower part of~~ said person on a support means in a pressure chamber such that the person from the waist down is enclosed in the chamber, said pressure chamber being equipped with a work-out means and containing a pressure;

closing seals around ~~the body of~~ said person to contain the pressure in said pressure chamber;

having said person use the work-out means against a resistance generated by the work-out means without exposing the person's legs to said person's body weight;

wherein said method comprises the further steps of

first stimulating the circulatory system of said person by using the workout device under ambient conditions,

then generating a pressure below atmospheric after said person has been using the work-out means for a specific amount of time.

34-39. **(Previously Canceled)**

40. **(Currently Amended)** An apparatus for increasing blood flow to a person's skin, for regeneration of skin and digestion of adipose cells

~~without causing an increase in gravity effects on the person~~, comprising a work-out device to be actuated with the person's legs; an air-tight housing enclosing the work-out device, said housing comprising an opening which is formed for tight enclosure of the person in a waist area; a device for producing a differential pressure in said housing, said device being connected with said housing and being arranged so as to alternately produce a pressure reduction and a pressure increase; and a support means within said housing for removing body weight from the legs of the person while actuating the work-out device, said support means being a seat.

**41. (Previously Canceled)**

**42. (Currently Amended)** An apparatus for increasing blood flow to a user's skin for regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the user~~, the apparatus comprising a work-out device to be actuated with the user's legs, said work out device being enclosed by an air-tight housing, said housing comprising an opening which is formed for a tight enclosure of the user's waist area, with a device for producing differential pressure in said housing, said device being connected with said housing and being arranged so as to alternately produce a pressure reduction and a pressure increase in the housing, wherein within said housing, a support means is arranged to take the user's body weight off said legs, and wherein a permanent interval switching between low pressure and

increased pressure in said housing takes place if a low pressure limit is reached, said low pressure limit being between 0.02 bar and 0.05 bar.

43. **(Previously Presented)** An apparatus according to claim 42, wherein the support means is a seat.

44. **(Previously Presented)** An apparatus according to claim 43, wherein the seat is adjustable in height.

45. **(Previously Presented)** An apparatus according to claim 42, wherein the device for producing a differential pressure is arranged so as to ensure a predetermined pressure throughout the housing.

46. **(Currently Amended)** An apparatus for increasing blood flow to a user's skin for regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the user~~, the apparatus comprising a work-out device to be actuated with a user's legs, said work-out device being enclosed by an air-tight housing, said housing comprising an opening which is formed for a tight enclosure of the user's waist area, with a device for producing differential pressure in said housing, said device being connected with said housing and being arranged so as to alternately produce a pressure reduction and a pressure increase in the housing, wherein within said housing, a support means is arranged to take the user's body weight off said legs, and wherein the apparatus is adapted to perform a ~~permanent~~ continuous change between low pressure and increased pressure within a period of 10 to 90 seconds.

47. **(Previously Presented)** An apparatus according to claim 46, wherein the device for producing a differential pressure is arranged so as to ensure a predetermined pressure throughout the housing.

48. **(Previously Presented)** An apparatus according to claim 46, wherein the pressure device provides a reduction in pressure from 0.02 bar to 0.05 bar.

49. **(Currently Amended)** An apparatus for increasing blood flow to a user's skin for regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the user~~, the apparatus comprising a work-out device to be actuated with the user's legs, said work-out device being enclosed by an air-tight housing, said housing comprising an opening which is formed for a tight enclosure of the user's waist area, with a device for producing a differential pressure in said housing, said device being connected with said housing and being arranged so as to alternately produce a pressure reduction and a pressure increase in the housing, wherein within said housing a support means is arranged to take the user's body weight off said legs, wherein said work-out device is adapted to generate a treading resistance, wherein an interval switching between low pressure and increased pressure takes place and wherein said treading resistance is coupled to said interval switching such that the treading resistance increases while said low pressure acts on said user.

50. **(Previously Presented)** An apparatus according to claim 49, wherein the device for producing a differential pressure is arranged so as to ensure a predetermined pressure throughout the housing.

51. **(Currently Amended)** An apparatus according to claim 49, wherein the pressure device provides a reduction in pressure from 0.02 bar to 0.05 bar.

52. **(Currently Amended)** An apparatus for increasing blood flow to a user's skin for regeneration of skin and digestion of adipose cells ~~without causing an increase of gravity effects on the user,~~ the apparatus comprising a work-out device to be actuated with the user's legs, said work-out device being enclosed by an air-tight housing, said housing comprising an opening which is formed for a tight enclosure of the user's waist area, with a device for producing differential pressure in said housing, said device being connected with said housing and being arranged so as to alternately produce a pressure reduction and a pressure increase in the housing, wherein within said housing a support means is arranged to take the user's body weight off said legs, and wherein a permanent interval switching between low pressure and increased pressure takes place in said housing within a period of 10 to 90 seconds if a low pressure of 0.02 to 0.05 bar is reached, wherein said work-out device is adapted to generate a treading resistance, said treading resistance being coupled to said interval switching such that the treading resistance increases while said low pressure acts on said user.

53. **(New)** Apparatus according to claim 1, wherein said work-out device generates a treading resistance being set to 0.8 to 2 watts per kilogram body weight of the person.

54. **(New)** Apparatus according to claim 53, wherein said treading resistance is decreased if said seat is moved from a low position to a high position within said pressure chamber.

55. **(New)** Apparatus according to claim 1, wherein said work-out device is actuated by a treading motion of the person's legs, and including a monitoring means for monitoring the treading motion and for interrupting a power supply to said pressure device if said treading motion is interrupted for a predetermined time.

56. **(New)** Apparatus according to claim 1, wherein said work-out device is actuated by a treading motion of the person's legs, and including a monitoring means and at least one valve, said monitoring means monitoring the treading motion and opening said at least open valve if said treading motion is interrupted for a predetermined time.

57. **(New)** Apparatus according to claim 1, wherein said work-out device generates a treading resistance, said treading resistance being coupled to said alternating pressure reduction and pressure increase in said housing.

58. **(New)** The method according to claim 33, comprising the following steps:



generating a continuous change between a pressure below atmosphere and a high pressure above atmosphere, and coupling the change in pressure to the resistance.

59. **(New)** The method according to claim 57, comprising the step of increasing the resistance when decreasing the pressure.

60. **(New)** The method of claim 33, comprising the following steps:

- having said person use said work-out means by performing a treading motion,
- monitoring said treading motion,
- interrupting the pressure decrease if said treading motion is interrupted for a predetermined period of time.